



**Galaxy Advanced Engineering, Inc.**

**P.O. BOX 614**

**Burlingame, California 94011**

**Tel: (650)-740-3244**

**Fax: (650)-347-4234**

**E-mail: BahmanZ@AOL.COM**

## **UGLI/PC**

### **A Universal Graphics Library Insta-Plot for Micro and Mini - Computers**

The **Universal Graphics Library (UGL)** is a high-level **FORTRAN** graphics library designed to support applications in engineering, scientific, and business environments. **UGL's** integrated routines allow programmers to generate graphics with the wide range of capabilities. **Universal Graphics Insta-Plot (UGLI)** is but one of many applications that **UGL** supports, and was primarily developed to allow "quick and dirty" plots to be made without the necessity of requiring a user to write applications linked with **UGL** by writing **FORTRAN** Code. **UGLI** can easily generate a number of different types of graphical plots, depending on the user's needs. It can be started either interactively or from previously created data files that are ASCII formatted text files. These data files may be generated by **UGLI** itself or by an independent application. All that is required is the data that defines what needs to be viewed, i.e., typical X-Y data pairs.

For many years, engineering and scientific applications have been executed on main frame or mid-size computers. Very large investments have been made in not only the software developments, but also in the associated data files that have been accumulated throughout the years. **UGLI** is structured to allow maximum usage of existing data files with minimum interactive tailoring to suite the desired final look. Thus, **UGLI** will allow an orderly migration path of existing data files to the PC environment. **UGLI** also provides expanded capabilities to existing graphics without expensive up front development.

The **Micro (PC)** and **Mini (UNIX)** and **VAX/VMS** and **ALPHA/AXP** version of **UGLI** is compatible with these operating system platforms. The code is an executable 32-bit product. The same version of the products is available for Networking Environment.

The main body of code is identical on all system. There is some variations in output devices that are routinely supported. For example, on **UNIX** system, a X-Window Driver is normally the primary interface to the user (with a terminal interface for multi-user systems). On a PC, this interface is replaced by a VGA/SVGA driver, and on other host systems, some terminal or printer is usually the preferred target device.

The following list itemizes some of the capabilities of **UGLI**;

- Multiple plot type;
  - I. 2-D and 3-D graphs and plots.
  - II. Interactive processing for;
    - 1. New TITLE(s)
    - 2. New X-LABLE
    - 3. New Y-LABEL(s)
    - 4. Rescale X-Axis
    - 5. Rescale Y-Axis(Axes)

6. NEW Input file
7. Point Connect(s) with/without/lines
8. Run-time EDIT File
9. Company Name
10. UGI and GAE LOGO
11. Change Output Device
12. Date on plot (On/Off)
13. Border (On/Off)
14. Plot Type Control
15. COLOR (On/OFF)
16. Character HEIGHT
17. Integer X-AXIS
18. Integer Y-AXIS
19. Real X-AXIS
20. Real Y-AXIS
21. GRID Spacing
22. Linear-Linear
23. Log X
24. Log Y
25. Log-Log
26. Define LEGEND
27. Line STYLES
28. Curve MARKERS
29. Line THICKNESS
30. Data AVERAGEING
31. Curve SMOOTHING
32. FONT Enhancement

- Support for common printer/plotter formats (HP LaserJet III/IV and PostScript).
- Support for VGA and SVAG displays.
- Generation of plots for word processing packages such as WORD and WordPerfect.
- Optional Printer/Plotter drivers to support older hardware.
- Windows 3.x, Windows 95 and Windows NT support all the Windows device drivers.
- It includes the utility that converts any existing CA-TELAGRAF and let you to plot within UGLI program.